

REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

I. CLAIM STATUS AND AMENDMENTS

Claims 1-7 were pending in this application when last examined and stand rejected.

Claim 1 is amended to incorporate the subject matter of claim 3.

Claims 1-7 are amended to make minor editorial revisions to better conform to U.S. claim form and practice. Such revisions are non-substantive and not intended to narrow the scope of protection. Such revisions include: replacing the "characterized by" language with "wherein"; revising the beginning of the claims to recite "A" or "The", and revising the claim language to provide proper antecedent basis throughout.

Claim 4 is amended to change its dependency to claim 1.

New dependent claims 8-14 have been added. Support for new claims 8-14 can be found throughout the general disclosure. For instance, support for claim 8 can be found at page 5, line 1. Support for new claims 10 and 11 can be found at page 3, last line, page 5, lines 12-14, and page 4, last line. Support for new claims 12-14 can be found in original claims 1, 3, 5, and 6.

No new matter has been added by the above claim amendments.

Claim 3 has been cancelled without prejudice or disclaimer thereto. Applicants reserve the right to file a continuation or divisional application on any cancelled subject matter.

Claims 1-2 and 4-13 are pending upon entry of this amendment.

The specification is amended to include appropriate section headings to conform to U.S. practice. No new matter has been added.

Applicants are submitting the present Amendment without prejudice to the subsequent prosecution of claims to some or all of the subject matter which might be disclaimed by virtue of this response (although none is believed to be), and explicitly reserve the right to pursue some or all of such subject matter, in Divisional or Continuation Applications.

Applicants thank the Examiner for the careful examination of this case and respectfully request reconsideration of the case, as amended. Below Applicants address the rejections in the Office Action and explain why the rejections are not applicable to the pending claims as amended.

II. PRIOR ART REJECTION

Claims 1-7 were rejected under 35 U.S.C. § 103(a) as being obvious over KAIS (US 6,177,205) in view of BHADESHIA (US 5,879,474) for the reasons in item 3 on pages 2-3 of the Office Action. This rejection is respectfully traversed.

It is believe that the amended claims (amended independent claim 1 and dependent claims 2-14) are not obvious over the combination of KAIS and BHADESHIA.

In KAIS, after welding, the stretch of rails is subjected to a heat treatment in order to obtain a mixed structure with at least bainitic and perlite contents (see claim 1). As explained in col. 4, lines 22-23 of KAIS, the bainitic content is about 30 to 40% and the perlite content is of at least 50%.

It is believed that KAIS and BHADESHIA cannot be combined, because KAIS teaches away from the claimed invention. As noted above, KAIS discloses a heat treatment step to arrive at a rail of steel having a combination of bainite and pealite. By contrast, in the present invention, there is no heat treatment after welding, and the structure of the steel is bainitic and does not contain perlite. See amended claim 1 and new claims 12-14. Accordingly, the combination of KAIS and BHADESHIA would lead away from the claimed invention, as it would lead to a different rail having a combination of bainite and pealite. It is well established that the prior art must be considered in its entirety

including sections that teach away from the invention. Moreover, a prior art reference that "teaches away" from the claimed invention is a significant factor to be considered in determining obviousness. M.P.E.P., Eighth Ed., Rev. 6 (September 2007) at § 2145, X, D, 1. Thus, it is believed that KAIS and BHADESHIA cannot be combined and/or modified to arrive at the claimed invention. See also new claim 9, which recites there is no heat treatment after welding. Though the instant claims are product claims, whereas the above-noted feature of heat treatment relates to a process, this process limitation should be given patentable weight since the step of heat treatment imparts a structural change on the properties of the claimed stretch of rail.

Regarding new claim 8, it is noted that in KAIS, the connection by flash welding is made using a nickel-based alloy insert (see claim 1). By contrast, in the present invention, there is no flash welding using a nickel-based alloy insert. See, for instance, new claim 8.

Further, the cited references of KAIS and BHADESHIA fail to disclose or suggest the hardness property of new dependent claims 10 and 11. Nor do they disclose or suggest the specific elements of new dependent claims 12-14.

In light of the above, Applicants respectfully submit that neither KAIS nor BHADESHIA, taken alone or in combination, teaches, suggests or makes obvious each and every element of the amended claims and new claims. For this reason, the claims are

believed to be novel and unobvious over the cited prior art references, either alone or when combined.

Therefore, Applicants respectfully submit that the above-noted 103(a) obviousness rejection is untenable and should be withdrawn.


III. CONCLUSION

In view of the above, it is respectfully submitted that the application is in condition for allowance and notice to that effect is hereby requested. If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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